

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

## WEATHER SUMMARY FOR FEBRUARY 1888.

In February, pressure begins to fall generally throughout India. The steady increase which takes place during October, November, December and January reaches its maximum in the last-named month, and during February the decrease commences which lasts throughout the hot weather. In the present year the decrease between January and February has been unusually large, for whereas during January there was a general and rather large excess of pressure as compared with the average, there has during February been a slight to largish deficit. As a rule, the weather over Northern India is distinctly drier during February than during January. This has, however, hardly been the case in the present instance, as the unsettled weather, which prevailed in the north-west, west and centre of India during the latter part of January, continued during February. In Bengal and Assam also very unsettled conditions have at times prevailed.

On the 1st the general distribution of pressure was such as is characteristic of the cold season. A large area of high pressure (30-20" and above) lay over Sind, the Punjab, Rajputana and part of the North-Western Provinces and the Central Provinces, while relatively low readings were reported from the west coast and from the south of the Bay. On the west coast the decrease of pressure occurred more rapidly than is normally the case, and a feeble depression apparently lay between Rangoon and Bombay. At both Bombay and Kurrachee the north-easterly wind was blowing rather freshly. The weather was generally fine, the only rain-fall reported being at Kurrachee and Jeypore. On the 2nd the distribution was more complicated and less normal. A broad band of relatively high readings stretched across Northern India extending from the Western Punjab to Assam, while almost equally high pressures were reported from the Carnatic and the west of the Bay. At the same time low-pressure areas prevailed over Burma, and over Guzerat and Sind. The depression which on the previous day had been shown near Bombay had apparently passed northward to the Gulf of Cambay, while a separate and larger storm lay near Kurrachee. With this distribution of pressure the winds were in general very irregular in direction, but well-marked cyclonic circulations were shown over Western India. At Kurrachee the wind was blowing with a velocity of 21 miles per hour from north-east. The weather was very cloudy all over the north-west and rain had fallen at Kurrachee, Hyderabad, Jacobabad, Quetta, and Ajmere, as well as at Darjeeling. On the 3rd, pressure decreased rapidly in the north-west of the Punjab and a fresh depression appeared in that region. Accompanying this additional disturbance there occurred a large extension in the rain fall area which included the whole of North-Western India, part of Central India, Sind and Guzerat. On the 4th, pressure rose over Western and fell over Eastern India. Rain ceased in Sind and Guzerat, but in Northern India it continued and extended eastward as far as Benares. On the 5th the weather improved. Rain was reported from Sibbagar, Dhule, Allahabad and Nowgong, but elsewhere the sky had cleared considerably and conditions appeared more settled. Fine weather continued during the 6th, but on the 7th rain recommenced in Sind and Baluchistan, and during the 8th and 9th extended to the hill and submontane stations in the Punjab and North-Western Provinces. On the 10th the unsettled conditions were transferred from North-Western to North-Eastern India, and rather heavy rain was reported from almost all stations in Bengal and Assam. On the 11th rain still fell at several places in Bengal and Assam, but elsewhere the weather was fine. This fine weather continued during the 12th, but on the 13th at all the hill and submontane stations and also at those in Lower Bengal and Assam further precipitation was reported. From the 14th to the 17th showers of rain, generally of small amount, were of daily occurrence around the head of the Bay and in parts of Eastern Bengal and Assam, but over the greater part of India conditions were fine and fairly settled. On the 18th a brisk barometric fall accompanied with rain and a southerly wind were reported from Quetta, and on the following day rain was falling at several of the Punjab stations and at Jacobabad. On the 20th the rainfall had extended into the North-Western Provinces, while it had almost ceased in the Punjab; but on the 21st rain was reported from the west and north of the Punjab, the west of the North-Western Provinces, Jeypore and the Central Provinces. From this date until the 28th, showers of rain continued to fall at intervals over the Central Provinces, the Punjab and the west of the North-Western Provinces, but the amounts were generally small and on the whole the weather was fair. On the 29th the distribution of pressure and the winds were fairly normal, and the only rainfall reported was a few drops at Raipur.

In Southern India the weather calls for little remark. No rain whatever fell in the Carnatic and hardly any in any other part of the Peninsula. In Burma also the weather, as is generally the case, was very settled.

Pressure.—Has been below the monthly average almost everywhere. At the hill stations in North-West Himalaya, the deficit has been less marked than on the plains; and at Mount Abu, Pachmarhi and Wellington there has been an excess, falling at Mount Abu, but considerable at Wellington. In Ceylon also there has been a slight excess. The deficiency has been on the whole greater over Northern and Central India than in the Peninsula.



**Temperature.**—Like January this was a generally cool month, though the relative coolness was less than in the preceding month. In Ceylon, the Carnatic, the Berars, in part of the Central Provinces and at a few places in Bengal and Upper India, there was indeed a slight excess of temperature. The greatest deficiency was  $3^{\circ}\cdot4$  at Dera Ismail Khan, but this amount was closely approached at Jacobabad and Jeypore. Frost occurred regularly at the hill stations during the first half of the month, the lowest minimum reported being  $27^{\circ}\cdot1$  on the 18th at Chakrata. Subsequent to the 15th, temperature rose fairly briskly, so that, while the highest maximum reported on the first was  $92^{\circ}$  at Salem, that on the 29th was  $90^{\circ}$  at Surat.

**Humidity.**—Except in Bengal the amount of moisture in the atmosphere has been generally in excess of the average.

**Rain.**—No rain has fallen during the month in Behar or the Carnatic, and very little in the Berars, the Deccan, Mysore or Dacca. On the other hand, Sind, Ouch and Rajputana have received much more than the normal amount, and the Punjab, the cis-Gangetic portions of the North-Western Provinces, Bengal, Guzerat, the Konkan, and Malabar have all received a greater or less excess.

The following table shows the amount of rain and the difference from the average during the month of February 1888, according to districts, as far as is indicated by the telegraphic reports:—

Districts.	No. of Stations.	Average rain-fall in February.	Difference from the average in February 1888.
Punjab, West .. .. .	7	1.45	+0.58
" East .. .. .	4	1.15	+0.13
North-Western Provinces, Trans-Gangetic .. .. .	9	1.25	-0.13
" " Cis- " .. .. .	3	0.23	+0.51
Behar .. .. .	3	0.49	-0.49
North Bengal .. .. .	2	0.64	-0.05
Assam, Cachar .. .. .	3	1.71	-0.32
Lower Bengal, Chutia Nagpore .. .. .	7	1.13	+0.19
Orissa, Northern Circars .. .. .	6	0.43	+0.11
Central Provinces, South .. .. .	7	0.33	+0.09
Berar, Khoudesh .. .. .	2	0.17	-0.04
Rajputana, Central India, Saurar, and Narbunda .. .. .	8	0.30	+0.86
Sind, Ouch .. .. .	3	0.20	+1.04
Guzerat .. .. .	3	0.09	+0.33
Konkan .. .. .	4	0.06	+0.07
Deccan, Hyderabad .. .. .	5	0.08	-0.04
Malabar .. .. .	4	0.21	+0.13
Mysore, Bellary .. .. .	4	0.15	-0.12
Carnatic .. .. .	6	0.37	-0.37
Lower Burma .. .. .	6	0.13	-0.02
Ceylon .. .. .	2	2.59	-0.28

SIMLA,  
5th March 1888.

W. L. DALLAN,  
for Offg. Meteorological Reporter to the Govt. of India.